

WANSON EPC 2500 ES

Customer: PTRHTF40020
 LE DUC FINE FOOD BV
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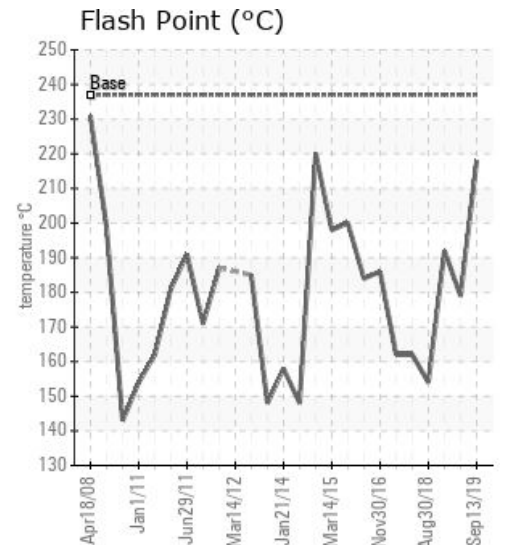
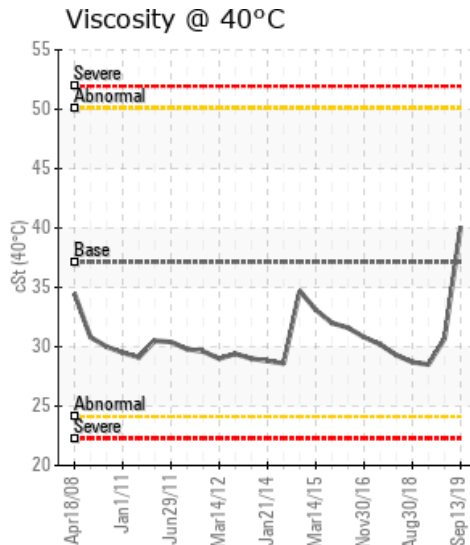
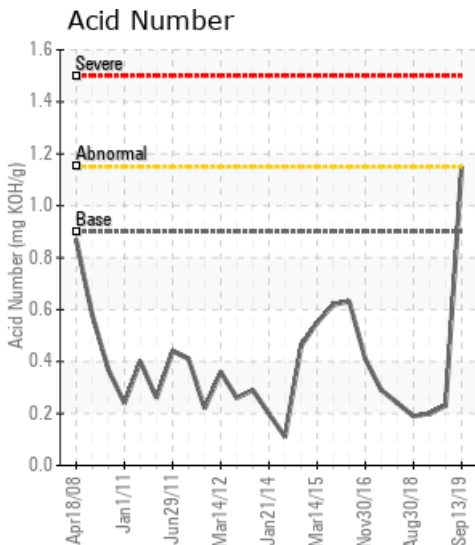
System Information
 System Volume: 1500 ltr
 Bulk Operating Temp: 265F / 129C
 Heating Source:
 Blanket:
 Fluid: PETRO CANADA PURITY FG HEAT TRANSFER FLUID
 Make: WANSON

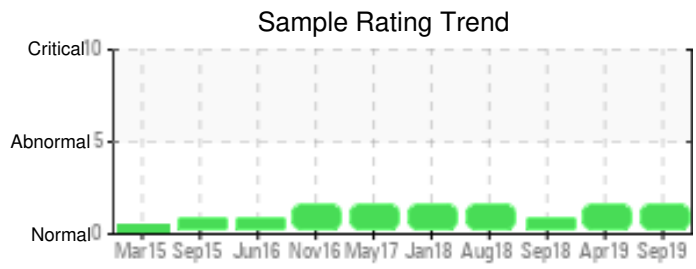
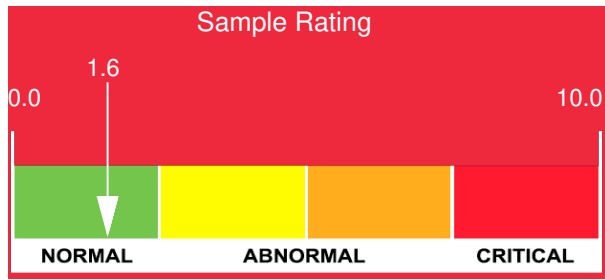
Sample Information
 Lab No: 02309761
 Analyst: Philip Riley
 Sample Date: 09/13/19
 Received Date: 09/19/19
 Completed: 11/05/19

Recommendation: Was this an oil change? All parameters around Flash Point and viscosity seem to have recovered to normal levels, but the insoluble are very high. Try some filtration to remove insoluble matter and check at normal oil sample interval.

Comments: Pentane Insolubles levels are severely high.

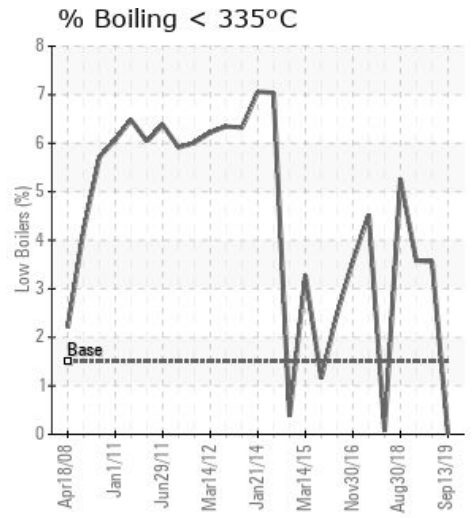
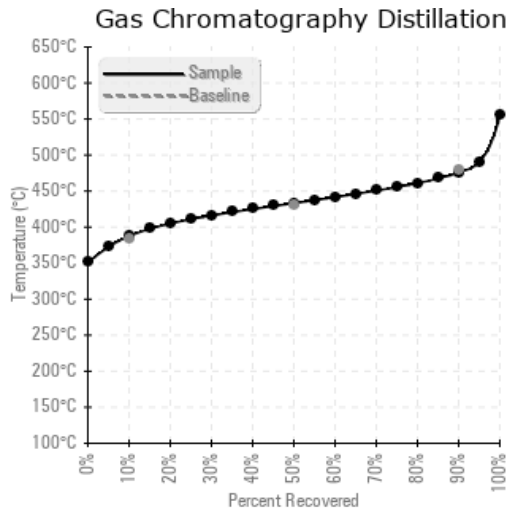
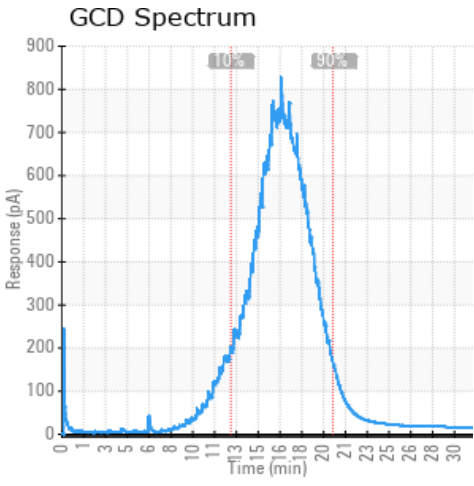
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
09/13/19	09/19/19	5y		424 / 218	33.5	40.1	1.15	0.960	729 / 387	812 / 433	888 / 476	0.00
04/16/19	04/24/19	0y		354 / 179	29.0	30.7	0.23	0.192	699 / 370	799 / 426	893 / 479	3.56
09/28/18	10/04/18	0y		378 / 192	23.8	28.5	0.20	0.236	699 / 370	796 / 425	889 / 476	3.58
08/30/18	09/04/18	4y		309 / 154	24.5	28.7	0.19	0.115	684 / 362	798 / 426	898 / 481	5.26
01/31/18	02/12/18	3y		324 / 162	19.3	29.3	0.24	0.037	732 / 389	814 / 434	905 / 485	0.07
Baseline Data				459 / 237		37.12	0.90		721 / 383	807 / 431	892 / 478	1.5





Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
09/13/19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	3
04/16/19	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	0
09/28/18	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
08/30/18	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0
01/31/18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0
Baseline Data			0	0						0			0	0					0				230	

Elemental analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



Historical Comments	
04/16/19	COC Flash Point trending downwards, and must show caution. If it can be recovered safely through any form of venting (although no great volume of light molecules look to be present) if would be worth doing to potentially extend the life of the fluid. Iron ppm levels are noted. COC Flash Point is abnormally low.
09/28/18	Looks to have been changed from previous sample. COC Flash Point already low and if safe to do so recommend venting system if possible to remove light molecules that have potentially brought flash point down. All other parameters within allowable limits. COC Flash Point is abnormally low.
08/30/18	COC Flash Point is very low indeed. Viscosity is trending slightly downwards also. Recommend the fluid is changed COC Flash Point is severely low.
01/31/18	COC Flash Point significantly lower than expected, confirming also previous result. Looking at the GCD the system has potentially been vented, there look to be fewer light end molecules. This has however had no impact on the COC Flash Point. All other parameters look to be improved from previous result. As this is a repeat result of the previous flash point, primary recommendation is for a system change out including a flush COC Flash Point is severely low.

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